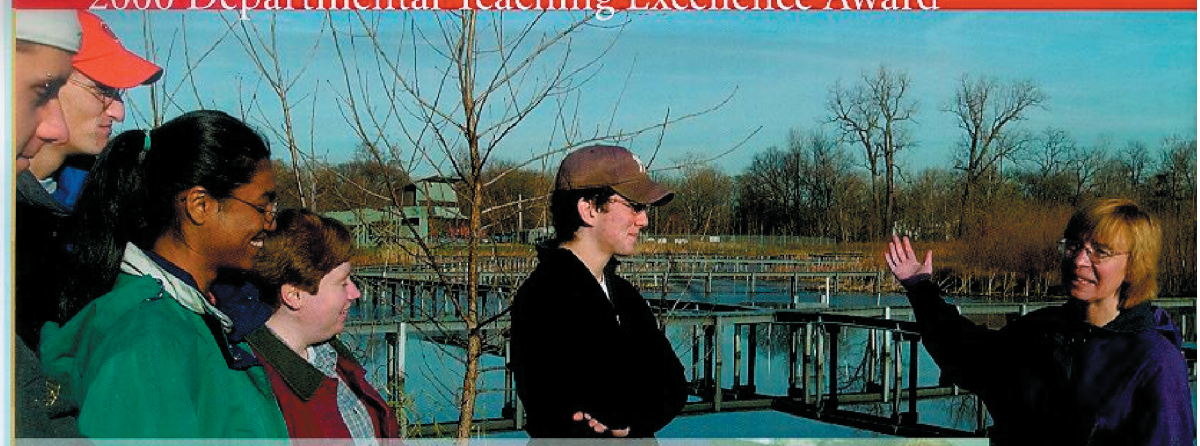
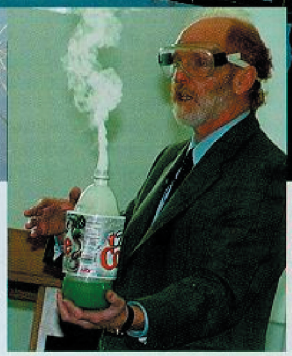
2000 Departmental Teaching Excellence Award



Chemistry Department Nets Top Honors for Teaching



(above) Susan Olesik's honors chemistry class collects wate samples from the wetlands. (left) Bruce Bursten demonstrates a "genie in a bottle" to the Board of Trustee

It takes more than just "good chemistry" to earn awards for teaching excellence. It takes outstanding faculty members, state of the art laboratories, and cutting edge curricula. Consistently ranked in the top 20 nationally, the Department of Chemistry was one of two Ohio State departments to receive the "2000 Departmental Teaching Excellence Award" given by the Office of Academic Affairs and The Ohio State University Alumni Association. The award was bestowed on the department for exhibiting an on-going commitment to teaching, research, and scholarship. The Department of Food Science and Technology was the second honoree.

Chemistry Chair Bruce Bursten said the department will use the $25,000 increase in annual budget from Academic Affairs to increase faculty salaries or to hire new faculty or staff members. The $1,500 one-time cash award from the Alumni Association will be used to fund a week-long summer workshop for high school chemistry teachers.

"Chemistry is a huge operation with a huge commitment to teaching," said Martha Garland, vice provost and dean for undergraduate studies. She further commended the department's aggressive use of technology, especially the web site (www.chemistry.ohio-state.edu) that is utilized by students, scholars, and teachers across the nation.

The Department of Chemistry has a long history of commitment to chemical education.

"How can a department strong in research—and we think we're one of the strongest research departments at Ohio State—and also considered so tough be a good teaching department?" Bursten asked.

"We start with faculty who are intrinsically interested in teaching," said Bursten. "They do a good job and are assisted by a superb support staff and a superb training program for graduate teaching associates and undergraduate student instructional aides. And you can't leave out the relationship between research and teaching. A big part of the undergraduate experience here includes the opportunity for students to work with faculty who are at the cutting edge of chemical research. These faculty share with our students their knowledge of the best new 'stuff' going on."

The faculty consists of one of the highest-achieving groups of professors on campus. The list of award winners and eminent scholars is lengthy and includes such accolades as:

- Distinguished University Professor
- Distinguished Scholar Award
- Alumni Award for Distinguished Teaching
- National Science Foundation's Early Career Development Award (in fact, we have the largest number of NSF Early Career award winners—eight in the past five years—of any single department at any university nationally)
- a PECASE winner (the highest individual award in the U.S.)

The department's history of winning awards is impressive in an impressive college. As of 2001, of the 36 Distinguished Scholar Awards given to faculty in the College of Mathematical and Physical Sciences, 16 went to the Department of Chemistry. Additionally, 12 of the college's 30 recipients of the Alumni Award for Distinguished Teaching are found in Chemistry.

The 2000 Departmental Teaching Excellence Award winners were selected by a committee consisting of three alumni association members, three students, and one faculty member from each of the departments that have won the award during the past three years.

CINCINNATI-CONGO AID

Vaccine sought for dying apes

CINCINNATI (AP) — Researchers at the Cincinnati Zoo hope they are getting close to developing a vaccine that could save bonobo apes in Africa from a virus that has killed some of them.

The species is endangered — an estimated 5,000 are left on the planet — because of poachers, civil war and human encroachment into their habitat.

Six bonobos have died suddenly in a Congo sanctuary this year because of a mysterious virus that attacks their brains and hearts. The sanctuary houses 26 of the apes.

The Cincinnati Zoo was granted an emergency permit to bring back tissue, feces, hair and blood from the apes. The samples are helping researchers find a cause for the deaths and develop a vaccine.

Ken Cameron, an associate veterinarian at the Cincinnati Zoo, was in Africa on another assignment when he visited the Lola ya Bonobo sanctuary in Congo in January.

He arrived in the midst of the disease outbreak, which already had claimed one animal and would kill another before he left. Three more died before Cameron got back to Cincinnati.

"The animals were dying rapidly, so we applied for our own permit to expedite bringing in the samples," Cameron said. "We needed pathology that the sanctuary just isn't set up for. That's one thing we can provide from this side of

TOM DODGE | DISPATCH

Ohio State University professor William J. Mitsch is the director of the recently completed Olentangy River Wetland Research Park.

Research thrives at wetlands park

By Tiffany Y. Latta
THE COLUMBUS DISPATCH

Frogs and insects swimming inside an aquarium in the lobby of the Heffner Wetland Research and Education building give visitors a glimpse of what's outside.

The aquarium was created by Deni Porej, an Ohio State University graduate student who studies frogs at the 30-acre Olentangy River Wetland Research Park. It includes leopard and green frogs, bullfrogs, an American toad and dragonflies.

"It's an up-close view of what you see swimming in the water out there as you walk along the boardwalk," Porej said.

Construction of the $3 million Heffner building was finished last month, and OSU officials celebrated last week. The $5 million research park was in development for more than 12 years. It features six wetlands, a pavilion for visitors, a bike path and the new research building, which includes research and office space for faculty and graduate students.

Inside the lobby, flat-screen monitors display up-to-the-minute readings of temperatures and water levels in the wetlands.

University officials hosted the first Wetland Invitational at the park, 352 W. Dodridge St., on Thursday and Friday.

Speakers discussed Everglades restoration and problems facing wetlands in Louisiana, Mexico, the Chesapeake Bay and Iraq.

The OSU park was the brainchild of William J. Mitsch, who calls wetlands "nature's kidneys" because they filter water supplies.

Mitsch, an OSU professor of natural resources and the research park's director, said 200 years of development has destroyed wetlands, which are vital for their ability to absorb floodwater.

Last year, President Bush revised the nation's wetland policy and ordered developers to make up wetlands lost to construction projects.

The park is similar to a wetland in Chicago that OSU professors used to visit with their students.

"We wanted to bring the wetlands to the students rather than bringing the students to the wetlands," Mitsch said.

He said the facility is known worldwide and hosts about 100 tours annually.

Students from universities, including Shawnee State, Wright State and Youngstown State, and scientists from England, France and Korea study at the park.

Cheri Higgins, 26, is working on her doctorate in environmental science. She said the Heffner building just adds to the park.

"We have a library, lab equipment and resources here that we can't get anywhere else," Higgins said. "This makes OSU one of the top places in the world to study wetlands."

tlatta@dispatch.com

Source: OSU School of Natural Resources

THE COLUMBUS DISPATCH

Cutting city jobs

Columbus and Cleveland ea
have cut city employees sinc
2000, with Columbus cuttin
273 jobs, or 3 percent of its
force, and Cleveland cutting
jobs, or 2.4 percent. Here ar
numbers of full- and part-tim
workers employed by each c
the end of each year:

	COLUMBUS	CLEVE
2000	8,969	9,7
2001	8,962	9,5
2002	8,785	9,4
2003*	8,696	9,5

* As of March 31
Source: City of Columbus, city of Cle

THE COLUMBUS

WORKERS

FROM PAGE C1

Taylor said a hiring free
didn't make sense becaus
cal positions need to be fi

Last year, Columbus hi
police officers and 40 fire-
fighters, many of them re-
placements.

At the end of 2002, Colu
had 1,827 on its police pa
up from 1,795 in 2000. Th
Division had 1,534 emplo
up only slightly.

Though fewer people w
for the city than when Co
took office, the payroll in-
creased from $380.2 milli
2000 to $410.6 million in

During those two years,
union employees — inclu
police and firefighters —
many nonunion administ
received annual 4 percent
es. Union workers also re
step increases and merit
Taylor said.

This year, through the e
March, Columbus has hir
workers, including new c

Restoring wetlands may aid dead zone

But $80 billion needed, scientist says

By Mark Schleifstein
Staff writer

The federal-state plan to restore Louisiana's rapidly eroding coastal wetlands could help solve another Louisiana problem: the annual dead zone, an area of low oxygen that forms each spring along the coastline, a nationally recognized wetlands scientist said Monday.

But the nascent plan to rebuild Louisiana's coastal wetlands, estimated to cost $14 billion, will be only the first step to solving that problem, said William Mitsch, a professor of natural resources and environmental sciences at Ohio State University and co-author of "Wetlands," an authoritative reference and textbook.

Mitsch told the Society of Wetland Scientists, meeting at the Hyatt Regency New Orleans this week, that as much as $80 billion would have to be spent rebuilding and restoring wetlands throughout the Mississippi River basin to curb the nitrogen levels that cause the dead zone. In all, he said, 24 million acres of wetlands would have to be rebuilt — an area just a bit smaller than Kentucky — throughout the basin, which includes all or parts of 31 states and two Canadian provinces.

Nitrogen, the main ingredient in fertilizer used on agricultural lands in the Midwest, is moved by rainwater through vast drainage networks in agricultural lands to myriad streams and rivers that carry it to the Mississippi, which channels it through Louisiana to the Gulf of Mexico.

There, it fuels huge algae blooms in the layer of freshwater that spreads over the heavier saltwater of the Gulf. When the algae dies, it sinks to the bottom and decomposes, using up oxygen. The layering of fresh- and saltwater inhibits the mixing of oxygen from the air into the deeper water, and the amount of oxygen near the bottom falls to below two parts per million, enough to kill tiny organisms that form the base of the Gulf's food chain.

Fish and shrimp avoid the low-oxygen area or they die. Last summer, the dead zone expanded to a record 8,000 square miles.

Mitsch said that by diverting river water into new areas to the east and west of the existing channeled course of the Mississippi in Louisiana, the nutrients would be absorbed by emerging wetland plants, reducing the amount that reaches the Gulf.

In the upper reaches of the river, marginal cropland could be restored to wetlands to help strain part of the nutrients out of rainwater runoff. Along the Mississippi and its tributaries, bottomland hardwood forests and swamps also could be restored to act as nutrient sinks.

Better use of fertilizers must be part of the solution, Mitsch said, "but it's not going to solve this problem unless there's a really draconian policy put in place" to force farmers to use less. And that's not going to be politically acceptable, he said.

Instead, a variety of voluntary programs would have to be retooled to target specific areas to reduce nitrogen loads, he said.

The role of wetlands scientists, he said, will be to help officials build the new wetlands properly.

"The last thing we want to do is spend a lot of money and build them incorrectly," he said. "Those involved in building them will have to understand wetland ecology."

•••••••

Mark Schleifstein can be reached at mschleifstein@timespicayune.com or (504) 826-3327.

Last updated 7:09AM PST March 2, 2004

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Los Angeles Times latimes.com

Shrimp Industry Finds Life in Gulf Coast 'Dead Zone'

By Scott Gold, Times Staff Writer

2003-08-25 INTRACOASTAL CITY, La.--For six days, the crewmen of the Thuan Hai shrimp boat floated in the Gulf of Mexico, eating instant noodles in silence, hauling in empty nets and coming to hate the dark water below. Resolved to failure, they headed back to port in Louisiana, sailing through a section of the gulf called the "dead zone," water that is typically too polluted and devoid of oxygen to support aquatic life.

Suddenly, they began catching 5-inch shrimp -- 5,000 pounds worth, enough for a relatively successful trip.

The boat pulled up to a dock in this scrubby town, hidden in the briny bayou. As a conveyer belt brought the catch to shore, deckhand Su Vo took a long drag from a stubby cigarette. Yes, he said, he knows he is lifting a page of blasphemy from the fisherman's bible. But he knows what saved his trip: bad weather.

Researchers sailing the gulf late last month discovered that the dead zone is suddenly, and drastically, smaller than it has been in nearly a decade. Salvation, the scientists say, came in a curious form: two powerful storms that raked Texas and Louisiana this summer, stirring the waters of the gulf and reintroducing oxygen -- and life -- into polluted waters.

"Before the storms, the shrimp died and sank to the bottom. And the fish, they floated on the surface like they had balloons in their stomachs," Vo, 63, said this month in the galley of the Thuan Hai. "Not anymore."

The dead zone has formed each year for at least two decades, and most scientists attribute it largely to fertilizer and other runoff pollution that originate in the Midwest. The pollutants cascade down the Mississippi River and other nearby waterways and spill into the gulf. There, they form large algae blooms that sap the water of oxygen. Some larger species can swim to healthier water, but the majority of aquatic life, including shrimp, becomes trapped and dies.

For the last two years, the zone has reached its largest recorded size: more than 8,000 square miles, almost the size of New Jersey.

The researchers, by sampling water late last month at 90 offshore stations stretching from the Mississippi River delta to the Texas-Louisiana border,

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determined that the zone is about 3,320 square miles, or less than half what it has been for much of the last two years, said Dr. Nancy Rabalais, a professor at the Louisiana Universities Marine Consortium and a leader of the research expedition.

Though the scientists expect the dead zone to reassemble and strengthen in coming weeks and months, a bout of bad weather has at least brought a glimmer of hope to a beleaguered industry.

Federal government forecasters said this month that they expect a busy Atlantic storm season; as many as nine hurricanes and 15 tropical storms could arrive off the southeast United States.

Like Vo, many commercial fishermen -- while they would never welcome destruction to the coast -- say quietly that a busy storm season could continue to break up the dead zone and build new, healthy fisheries.

"It sounds like a miracle," said Eddie Gordon, president of the Southern Shrimping Alliance, when told about the reduction in the size of the dead zone. "And the shrimp industry needs some miracles right now."

Indeed, along the Gulf Coast it is not a time of celebration --far from it. That commercial fishermen have been reduced to hoping for bad weather is a reflection of the sorry state of the region's once-mighty shrimp industry. For several years, shrimpers have fought soaring fuel and insurance prices, labor shortages and plummeting shrimp prices. Then about two years ago, a rising tide of imported, farm-raised shrimp turned into a flood.

More than 85% of the 1.4-billion pounds of shrimp eaten in the United States each year is imported from Latin America and Asia, a chief factor in driving down prices. Shrimpers have accused exporters of illegally dumping farm-raised shrimp into the United States at below-market prices, an allegation those countries have denied.

The public grandstanding over imports underscores the terrible turn in the economy of the Gulf Coast commercial shrimping industry, which employs more than 70,000 fishermen.

Banks have foreclosed on scores of shrimp boats. Many shrimpers who can afford the monthly payments on their boats are letting them sit idle at piers and docks. The reason: Fishermen in some areas sell their shrimp for less than 80 cents a pound -- less than it costs for a gallon of gasoline.

"You don't make money with those kinds of numbers," said Joseph Doan, an owner of Intracoastal Seafood Inc.

Doan, 44, a middleman of sorts in commercial fishing, bought about a million pounds of shrimp from fishermen last year. His business earned between 10 and 15 cents per pound by selling the shrimp to processing plants. The business is based at the Louisiana dock where the Thuan Hai, one of 18,000 shrimp boats that have historically fished the gulf, was docked.

Doan often pays fishermen ahead of time for the shrimp they hope to catch -- an unusual arrangement that can cost him dearly. But, he points out, tough times call for tough business decisions.

"If they don't make it," he said, "I don't make it. And you have to put your conscience to work too. Life on the sea, it's hard. We all work hard. We are in this together."

With so many perceived hurdles before them, some shrimpers question the contention that a shrinking dead zone will give their industry a significant

boost.

That's because the situation has become so dire, they say, that to a degree it doesn't matter how many shrimp they catch. They say they still can't make a profit -- a conundrum that prompted Congress to provide $35 million in disaster-relief funding this year, a move that some saw as the beginning of a long-term federal subsidy for the industry.

"No matter how much we catch, we aren't making ends meet," said Dean Falgout, 46, a Houma, La., resident and a commercial fisherman since he was 17. "Last year, I caught more shrimp than the year before and I made less money. Everything is overpriced right now except the shrimp."

Calvin Nguyen, the executive director of the Vietnamese-American Commercial Fishermen's Union and a New Orleans resident whose family has been in the shrimping business since 1978, said the time has come to focus on laws, regulations and competition, not the environment.

"Most of these things are man-made problems," he said. "We'd rather not depend on Mother Nature."

The majority of people connected to the industry, however, as well as scientists who are struggling to address pollution problems that contribute to the dead zone, say the reduction in its size is at least a step in the right direction.

A coalition of government agencies and states that border the Mississippi has launched an initiative to reduce the pollutants and the size of the dead zone. Federal legislation approved last year offers farmers incentives to reduce fertilizer use.

But much of the burden of funding measures that could make a significant dent will fall to state governments, said William Mitsch, a professor of natural resources and environmental science at Ohio State University and one of the scientists trying to tackle the dead zone. Most state governments are strained and cannot afford to fund the campaign adequately, he said.

So Mother Nature, for now, might be the industry's best ally.

"If the gulf stays stirred up, that's the best they can hope for -- at least until we figure out how to solve the problem up here," Mitsch said. "And that's going to take a while. The whole thing is moving at a snail's pace."

At the Intracoastal City dock, several workers finished unloading the catch from the Thuan Hai. Falling shrimp antennae formed a virtual curtain on the end of the conveyer belt, attracting the attention of a small dog and a giant cluster of flies.

Ty Ha, 63, the captain of the Thuan Hai, looked on, still wearing his stained blue work shirt and his white rubber boots. He smiled wearily at the short stack of boxes of ice and shrimp that dock workers had put together from his catch -- three weeks' work.

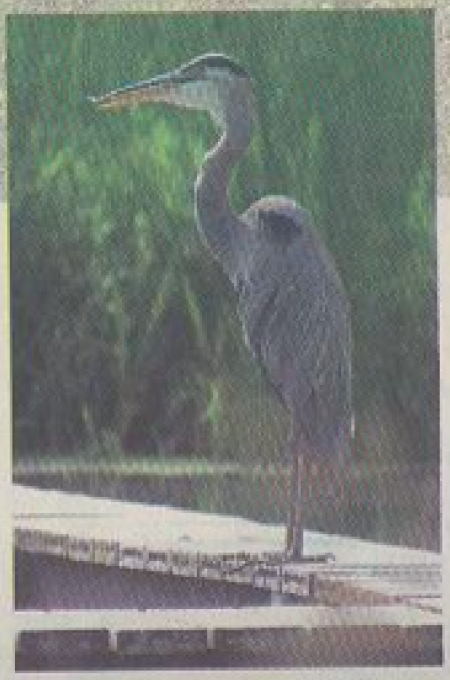
"I think we can do better in the near future. The storms have helped," he said. "But it all depends on nature. Who knows how long it can last?"

Sandefur Wetland Pavilion

The observation tower at the Sandefur Wetland Pavilion at the Dientangy River Wetland Research Park (DRWRP) on campus is one of my favorite places on the planet.

From the view of the wetlands and experimental wetland mesocosms at the Dientangy River wetland

Sandefur Wetland Pavilion



The observation tower at the Sandefur Wetland Pavilion at the Olentangy River Wetland Research Park (ORWRP) on campus is one of my favorite places on the planet.

First, the view of the wetlands and experimental wetland mesocosms at the Olentangy River wetland site is spectacular. In the summer you can see green in every direction and it looks like nature is all around (except for an occasional airliner going to Port Columbus and the bikers and joggers on the Olentangy River bike path who glide along the horizon of the wetland site). It is hard to imagine that you are on a campus of 50,000 students and in a city of more than a half a million people from this second-story elevation. In the winter, the frozen whiteness is beautiful even without the green forests hiding the urban world.

I have also noted that, on the oppressively warm days that are frequent in Columbus town, it is pleasantly cool even 25 feet off the land surface, out of the sun and in the breezes coming off the wetlands.

It is the best place in the city to watch, through the duck blind we built there, the birds and critters in our wetlands. I have watched herons and kingfishers fish; swallows and swifts — in beautiful flight patterns over the water — consume emerging insects; muskrats busily "musking about" and building their winter lodges; beavers swimming and carrying branches for their new dams; and mallards, wood ducks and blue-winged teals tending their ducklings. It is also a great place to unobtrusively observe my graduate students and others conducting their research (a view from 200 feet away is a great way to see the whole picture) and watch students in more than a dozen courses from five colleges use the ORWRP as a living laboratory.

Finally, it is one of the most popular stops when we give more than 100 tours per year to school children, high school students, garden clubs and visiting scientists. And many times the critters become the teachers themselves and capture the interest of even the most uninterested high school senior on a required tour. In those cases, I just change the prepared lecture and let nature teach. That is the beauty of the place.

— **Bill Mitsch**, Distinguished Professor of Natural Resources and Environmental Science, College of Food, Agricultural, and Environmental Sciences and director, Olentangy River Wetland Research Park

Storms bring life back to gulf's 'dead zone'

By Scott Gold
Los Angeles Times

INTRACOASTAL CITY, La. — For six days, the crewmen of the Thuan Hai shrimp boat floated in the Gulf of Mexico, eating instant noodles in silence, hauling in empty nets and coming to hate the dark water below. Resolved to failure, they headed back to port in Louisiana, sailing through a section of the gulf called the "dead zone," water that is typically too polluted and devoid of oxygen to support aquatic life.

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Purdue News

September 4, 2003

Constructed wetlands in the environment is workshop focus

WEST LAFAYETTE, Ind. - A Sept. 12 workshop at Purdue University will examine the value of constructed wetlands for protecting the environment. The keynote address will focus on the option of using a system of wetlands to control pollution flowing into the Gulf of Mexico from the Mississippi River Basin.

William Mitsch

William Mitsch, director of the Olentangy River Wetland Research Park at Ohio State University, is the featured speaker. He will discuss how using constructed wetlands and riparian forests could control excess nitrogen flow through the waterways into the Mississippi River and the Gulf of Mexico. The pollution reduces oxygen in the water and damages fish and other aquatic creatures.

The workshop's morning sessions will include presentations on constructed wetlands for improving water quality, hydrologic issues related to wetlands development, wetlands engineering and regulation of constructed wetlands used for waste treatment. The afternoon session will be a field tour of local projects with discussions on design, operation and value of constructed wetlands.

Mitsch, the OSU distinguished professor of natural resources, environmental science and ecological engineering, has served on three National Academy of Sciences panels on wetlands. In 1998 he chaired a scientific panel convened by federal agencies to propose solutions to the pollution in the Gulf of Mexico. He has been awarded the Environmental Law Institute/EPA National Award for Wetland Research and the CH2M-Hill Foundation National

Environmental Award.

The workshop will be at the Purdue University John S. Wright Forestry Center, 1011 N. County Road 725 W., West Lafayette, Ind. Registration will be from 8-8:30 a.m., with the morning sessions running from 8:30-11:15 a.m. The afternoon session and field tour will be from 1-3:30 p.m.

The Purdue Environmental Sciences & Engineering Institute, the Department of Forestry and Natural Resources, the Indiana Water Resources Research Center and the U.S. Environmental Protection Agency are sponsoring the workshop.

There is no fee for the workshop. To register contact the Environmental Sciences & Engineering Institute at (765) 496-3209. More information is available online.

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(765) 496-7481, ssteeves@purdue.edu

Source: Ron Turco, ESEI director,
(765) 496-3209, esei@ecn.purdue.edu

Ag Communications: (765) 494-2722; Beth Forbes, bforbes@aes.purdue.edu; http://www.agriculture.purdue.edu/AgComm/public/agnews/

Note to Journalists: Mitsch is available for interviews prior to Sept. 12 for advance stories and also for interviews on the day of the workshop. Contact Susan Steeves, (765) 496-7481, ssteeves@purdue.edu.

Related Web sites:
Purdue Environmental Sciences and Engineering Institute
Purdue Department of Agronomy
Indiana Department of Environmental Management
Ohio State University Olentangy River Wetland Research Park

To the Purdue News and Photos Page

THE COLUMBUS DISPATCH | Science | TUESDAY, SEPTEMBER 30, 2003

Ohio State, LSU seek ways to clear up gulf's 'dead zone'

By Janet McConnaughey
ASSOCIATED PRESS

NEW ORLEANS — Louisiana, working against time to keep its coast from sinking into the Gulf of Mexico, is looking to the Midwest for help with a related problem — a seasonal "dead zone" in the gulf.

Nitrogen-rich water from streams that empty into the Mississippi River feeds a population boom of one-celled organisms — so many that when they die and decompose at the bottom, the process eats oxygen out of the water.

That creates a dead zone in the gulf of 6,000 to 7,000 square miles. Tropical storms this year churned up the water and mixed oxygen back in, shrinking it to 3,300 square miles in July.

Wetlands and forests trap and use nitrogen and other nutrients carried off of fields in rainwater. Turning a fraction of Midwestern farmland back to marshes or swamps and returning forests to riversides and floodplains could go a long way toward a dead-zone solution, researchers say.

Louisiana's coastal erosion — 25 to 30 square miles a year — also is inextricably tied to the Mississippi River. Flood-control levees throughout the basin keep the Mississippi's waters within its banks.

But without the mud that floods leave behind, the land sinks a bit every year, until it is under water.

Louisiana's coastal-restoration program is paying $150,000 to have researchers at Ohio State and Louisiana State universities figure out how much new upriver wetlands are needed, where they should go and how they should be set up.

If a wetland isn't the right size and in the right position, it won't be much help, said John Day, LSU's chief researcher.

His counterpart at OSU is William Mitsch, who has created 30 acres of swamp and marsh on university land north of the main campus.

"Together, north and south, we can tackle this problem," Mitsch said. "Louisiana has a hypoxic dead zone that's due to runoff from farms throughout the Mississippi watershed. A large restoration of wetland areas in the Midwest is the answer."

It also would mean better water, better flood control and more wildlife habitat across the Mississippi basin, Day said.

The current estimate is that about 5 million acres of wetlands and 19 million acres of forest would be needed. The wetlands might take 3 percent of current farmland in affected states, Day said.

"This is not an attempt to point fingers at farmers," he said. "The upper Midwest has an $80 billion-a-year farm economy. They're producing food that feeds us all."

Keeping the problem in check

Researchers from Ohio State and Louisiana State universities will study how many new upriver wetlands are needed to cut back the "dead zone" in the Gulf of Mexico.

Source: Ohio State University
THE COLUMBUS DISPATCH

THE LANTERN
THE STUDENT VOICE OF OHIO STATE UNIVERSITY
Current Issue: Monday, March 1, 2004

OSU, LSU work to save Mississippi watershed

By Dallas Scrip

Published: Thursday, October 2, 2003

Ohio State, along with Louisiana State University in Baton Rouge, is attempting to solve a national environmental travesty.

Every spring, nitrogen and other chemicals flow down the Mississippi River watershed from northern farms turning more than 7,000 miles of the Gulf of Mexico into a "dead zone," or hypoxia.

"The Gulf of Mexico hypoxia is, in my view, an unacceptable pollution problem that must be solved," William J. Mitsch, professor of natural resources, said.

The Mississippi River watershed extends west to the Rocky Mountains and east to the Allegheny Mountains - including 40 percent of the lower 48 states.

The universities received $150,000 from the Louisiana Department of Natural Resources and the U.S. Army Corps of Engineers for a year-long initiative. The money will help researchers get to the root of problem and begin to clear the watershed. The goal is to develop a program to restore the wetlands and water quality in the Mississippi-Ohio-Missouri basin.

Mitsch said creating wetlands in the Midwest could help decrease polluted run-off.

"We are taking the first baby steps toward the eventual restoration of our watershed," Mitsch said.

The two universities initially are interested in deciding what research still needs to be done on the wetlands to ensure the eventual success of the program, Mitsch said.

"We currently lack a comprehensive, integrated approach to solving the hypoxia problem," said John Day, professor of coastal ecology at Louisiana State University. "As a group, we plan to design solid scientific programs that explain how to restore wetlands and stream-side forests, how to use wetlands to remove nutrients from water and how much area these wetlands need to cover."

This process is going to take decades, Mitsch said.

"It took 20 years to restore the Everglades, and that was only one state; it will be difficult to get 26 states working together to repair the basin," he said.

Mitsch said the clean-up initiative will benefit farmers because there might not be any regulations on the use of fertilizers.

"The opportunity to restore wetlands and see wetlands at work cleaning up the environment would be an asset to us in the Midwest," he said.

Research park prime spot for OSU fans

Parking, tailgating available at facility north of stadium

By Tiffany Y. Latta
THE COLUMBUS DISPATCH

With fewer than 900 parking spaces on the Ohio State University campus and more than 100,000 people attending football games, finding a spot can be a problem.

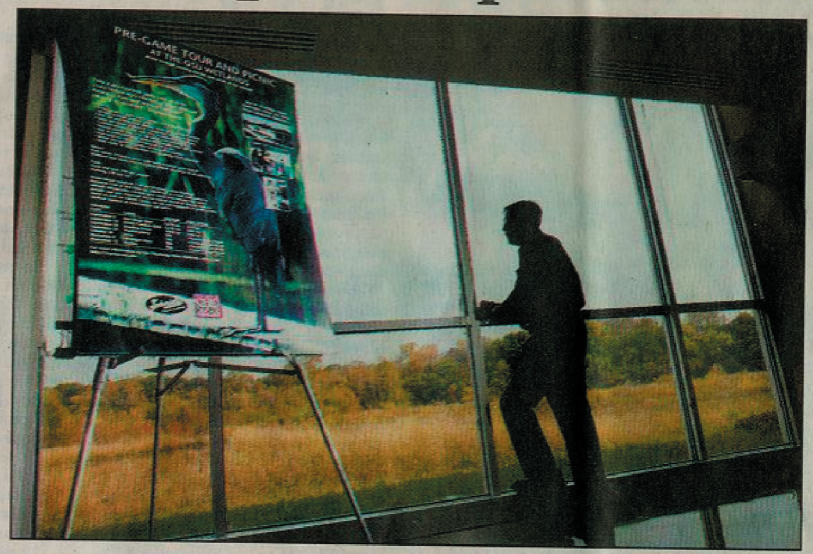
But Steve Mueller knows of one that he says is almost perfect — at Ohio State's Olentangy River Wetland Research Park, about a 1¼-mile walk from Ohio Stadium.

The 30-acre park — which has six wetlands, a pavilion for visitors, a bike path and a research building — allows fans to reserve a parking space and enjoy a catered tailgate party.

About 100 parking spaces are available in the wetlands area. Touring the facility, north of the main campus at 352 W. Dodridge St., is optional.

"It's a terrific way to start a game," said Mueller, director of institutional advancement at the Ohio Historical Society and a member of the advisory board for the research park.

Parking and tailgating at the research facility have been available since Sept. 6, when the Buckeyes played San Diego State, but few people know about it, said Bill Mitsch, director of the park.



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Parking costs $10 per car, the same fee charged at other campus lots. Donations are accepted for the tour, and the cost of lunch depends on how much food is purchased.

The $5 million research park was in development for more than 12 years, and the $3 million Heffner research building was finished in April. In the lobby, flat-screen monitors provide up-to-the-minute information on such things as the temperature and water levels of the wetlands. On game days, a TV broadcasts pre-game activities.

About 30,000 people have visited the facility, but Mitsch wants to encourage more to see the park.

"The whole idea is to come to the wetlands and learn something before the ballgame," he said. "It gives us a chance to show off the building and lets people see something interesting about the wetlands."

Edward Bischoff, 69, of Powell, has parked at the research facility for most OSU home games this year.

Bischoff, who is on the advisory committee for the research park, said the walk to the stadium is a little long for him, but it's worth it.

THE COLUMBUS DISPATCH

Director Bill Mitsch wants more people to visit the wetlands park. Tours are available before football games.

"I'd rather give $10 to the wetlands than give it to someone else."

The wetlands park opens four hours before each home game. Tours — 35 to 45 minutes each — begin two hours before the game. Reservations are required. Call 614-247-7984 or 614-292-9774 or e-mail mitsch.1@osu.edu.

tlatta@dispatch.com

Case of missing Cleveland girl generating tips

CLEVELAND (AP) — Police detectives working the case of missing 11-year-old Shakira Johnson receive about four tips every day.

Some are from sincere callers thinking they have spotted the girl. Some are from people who say they have had visions about her. Some are from pranksters.

She disappeared a month ago from a block party near her home.

Investigators say they check every tip, no matter how preposterous.

"You don't know when you're going to get the one," said police Cmdr. Michael McGrath, who is heading the investigation into Shakira's disappearance.

The National Center for Missing and Exploited Children sent two former law-enforcement officers to Cleveland after she disappeared.

The center's Team Adam faxed her photo and vital statistics to 10,000 Ohio motels, stores and police departments.

Now people nationwide are calling, thinking they have spotted her. Bob O'Brien, who heads Team Adam, said that's good, even if tips lead nowhere. It's frustrating when there are no tips, he said.